

## Server Components Supporting Application Delivery &amp; Execution License

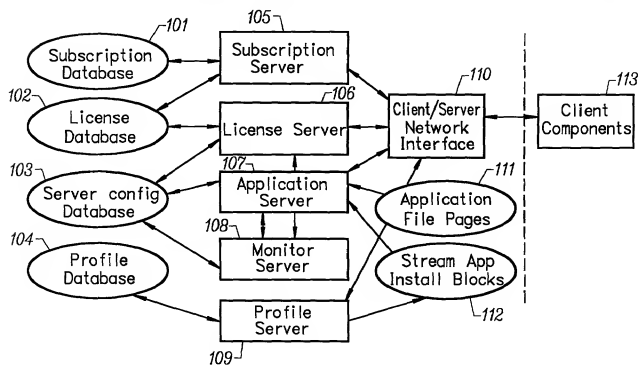


FIG. 1

Client Components Supporting Application Delivery & Execution

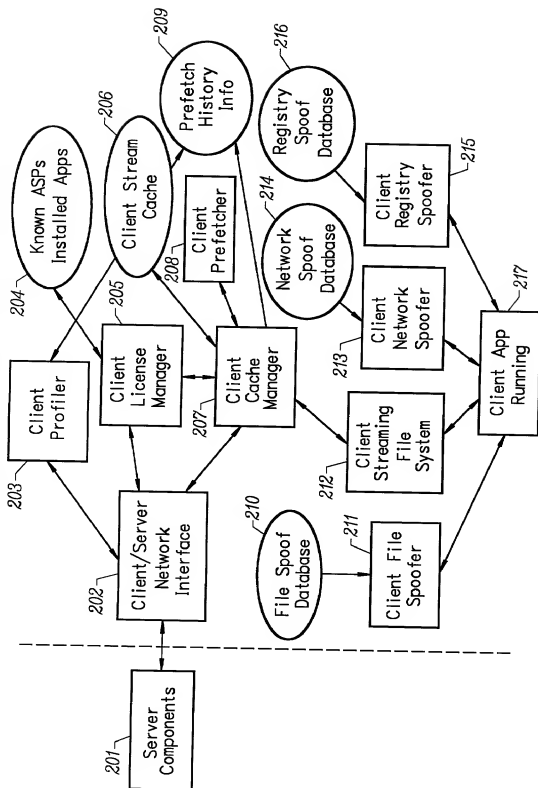


FIG. 2

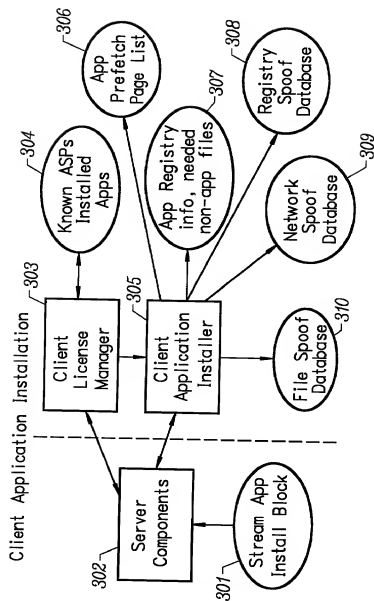


FIG. 3

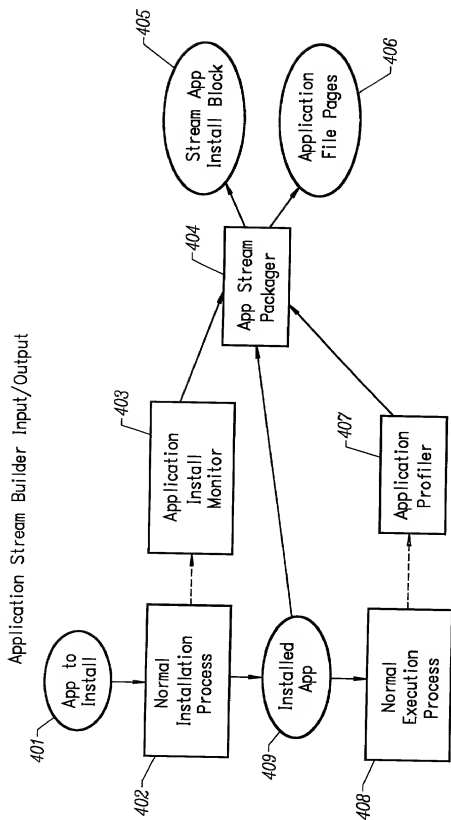
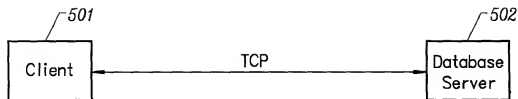
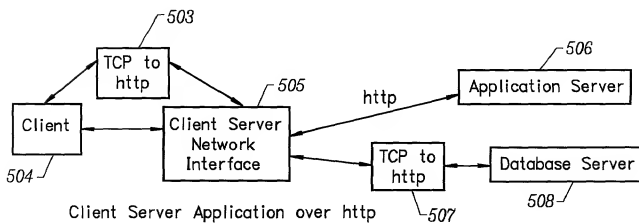


FIG. 4



Client-Server Application  
over TCP

*FIG. 5A*



*FIG. 5B*

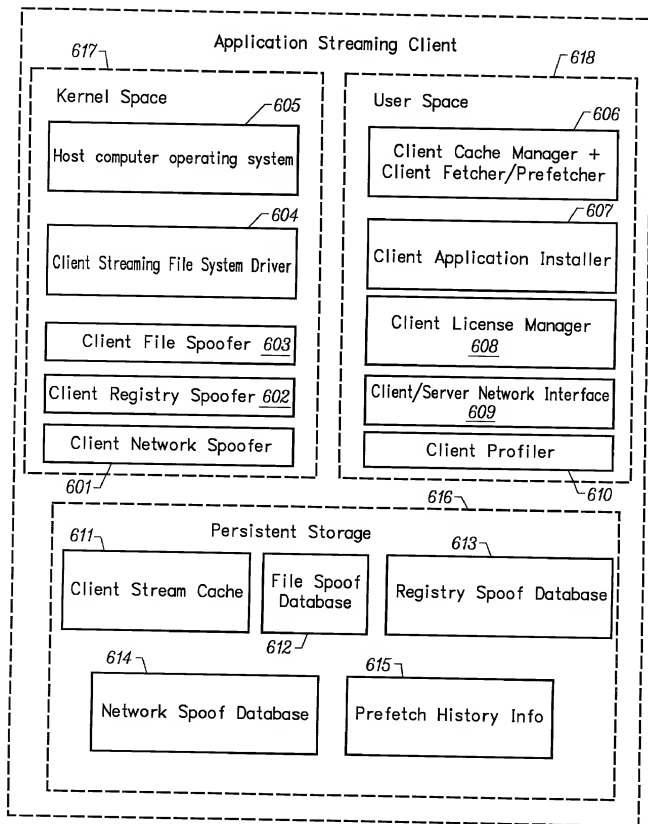


FIG. 6A

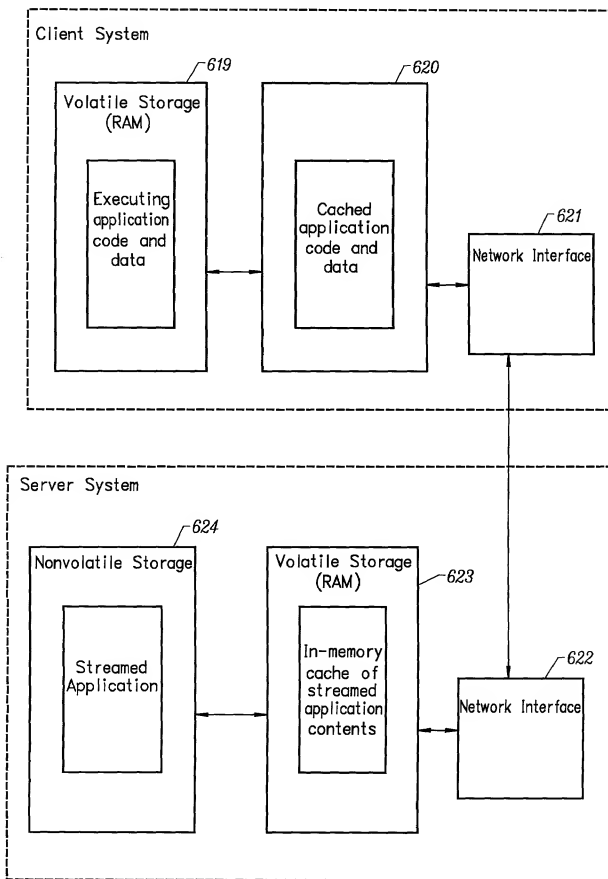


FIG. 6B

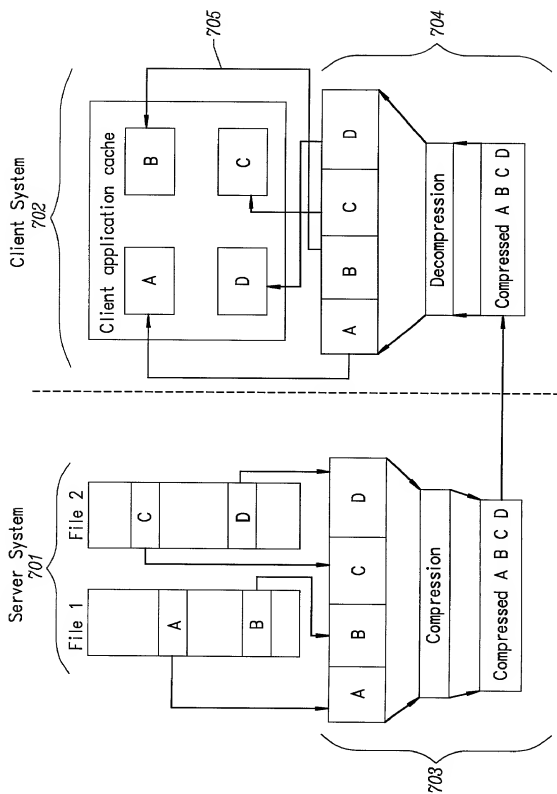


FIG. 7A



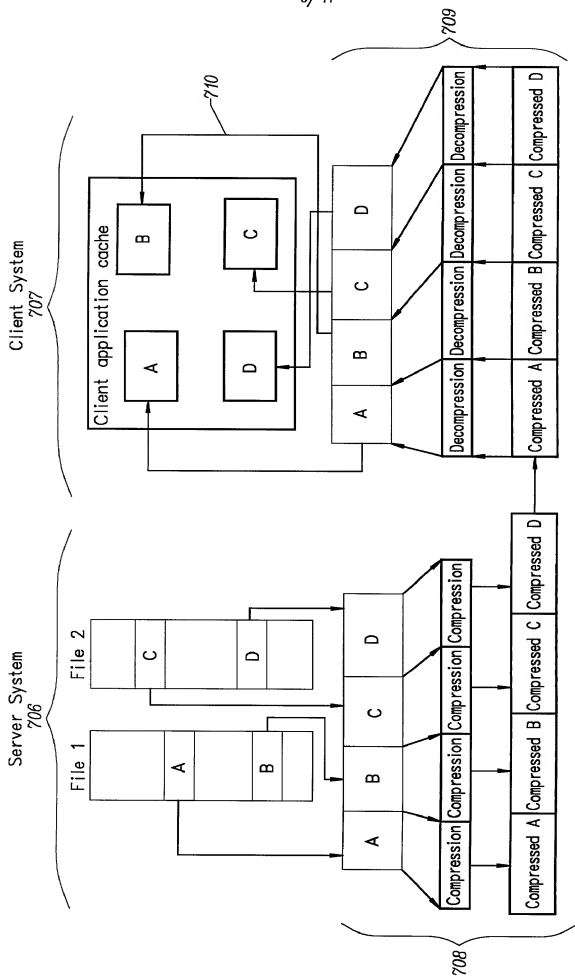


FIG. 7B

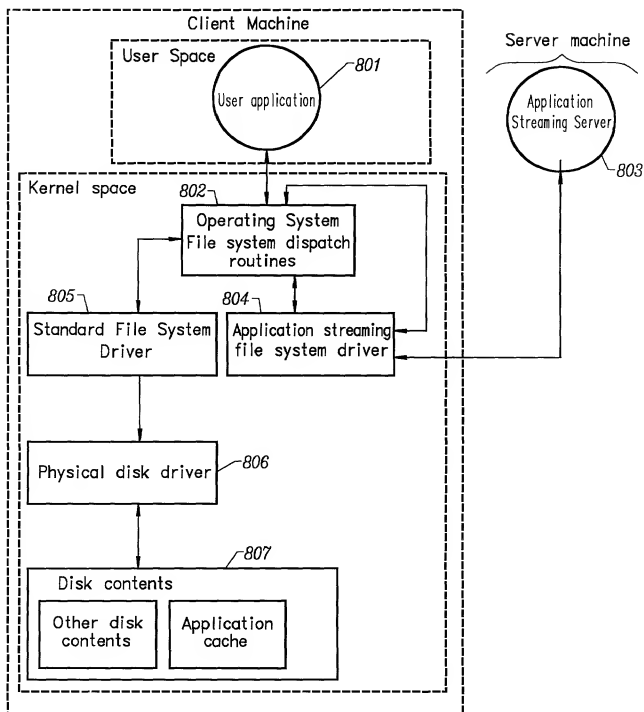


FIG. 8

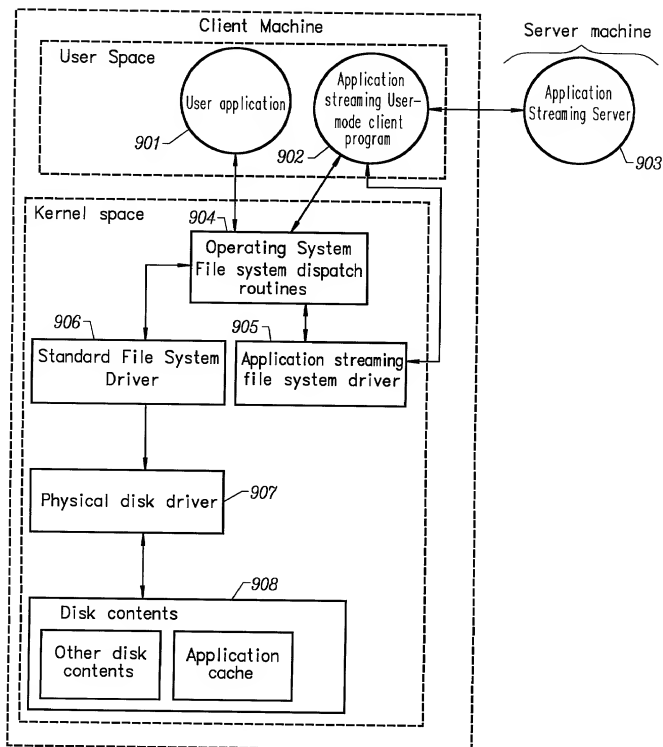


FIG. 9

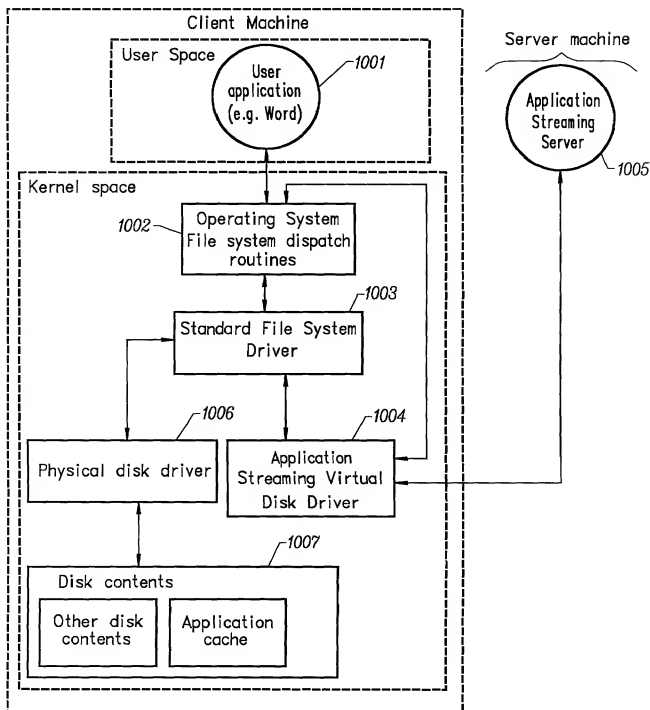


FIG. 10

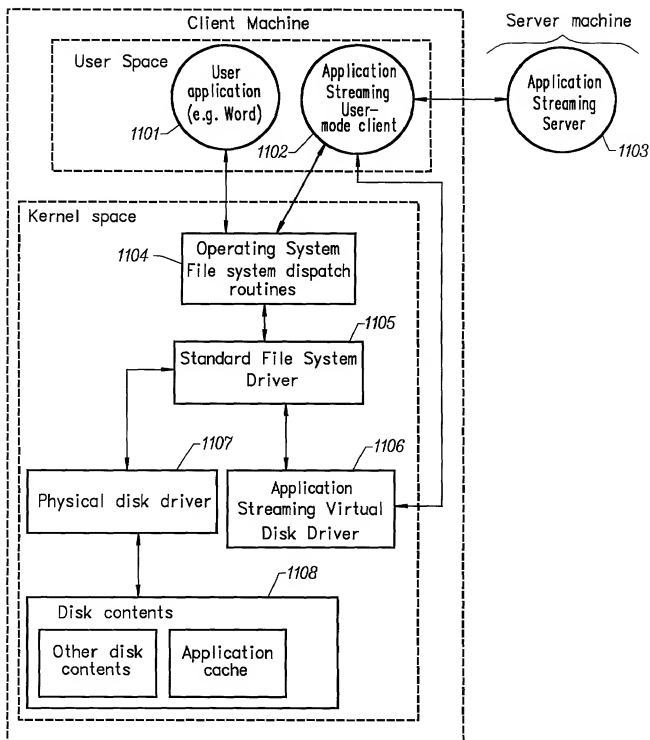
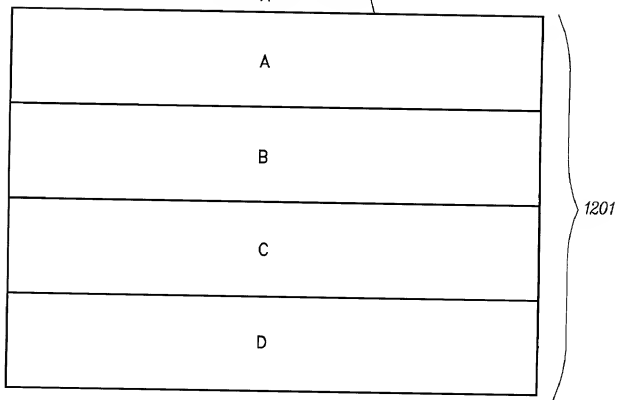


FIG. 11

Unencrypted Cache



Encrypted Cache

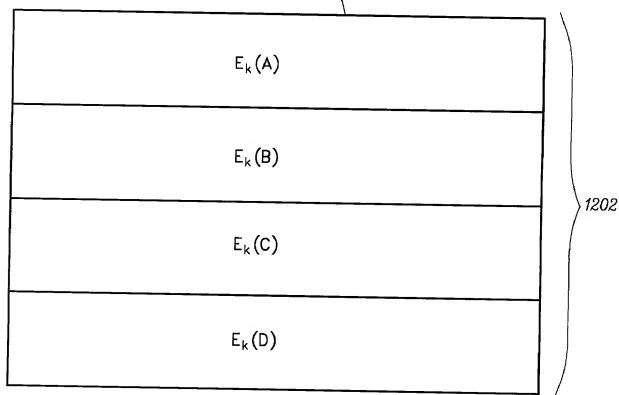


FIG. 12

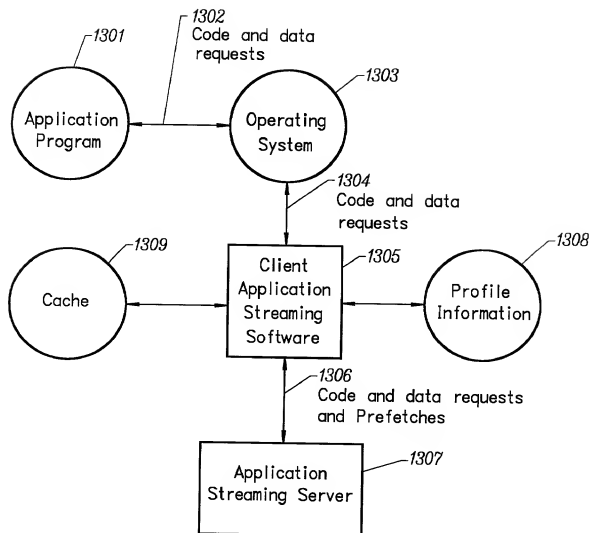


FIG. 13

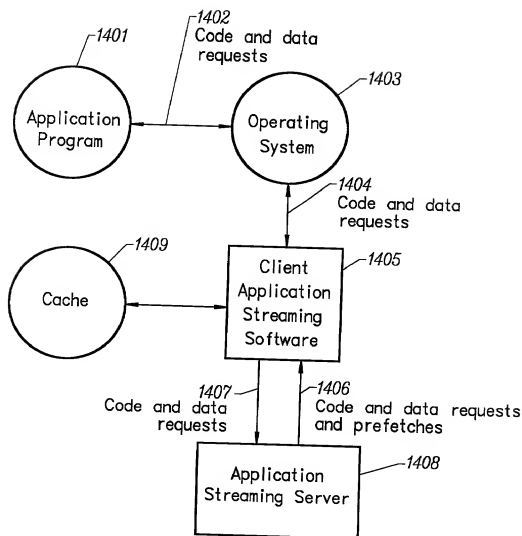
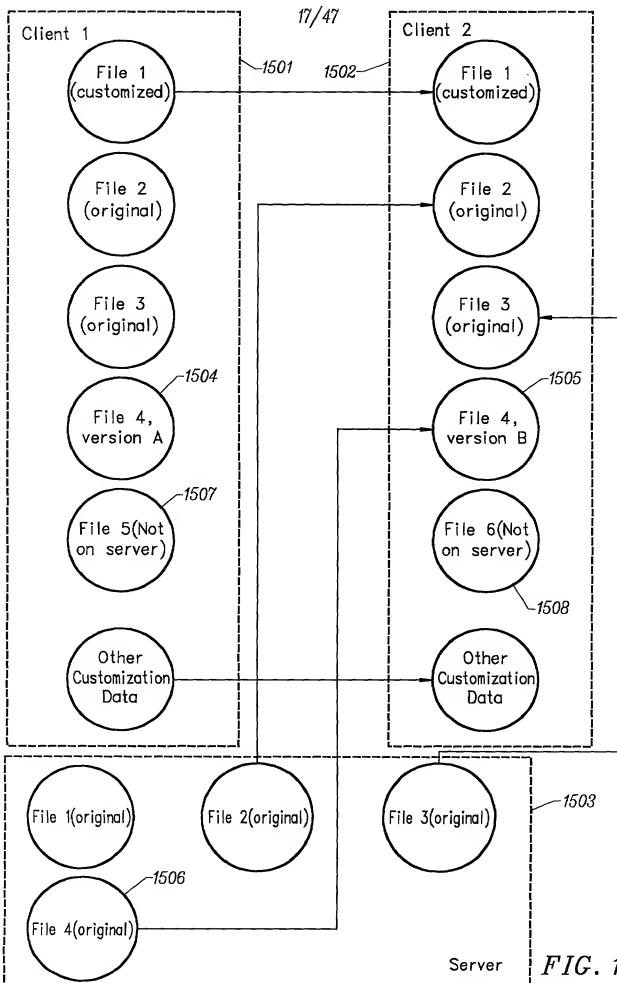


FIG. 14





Server

FIG. 15

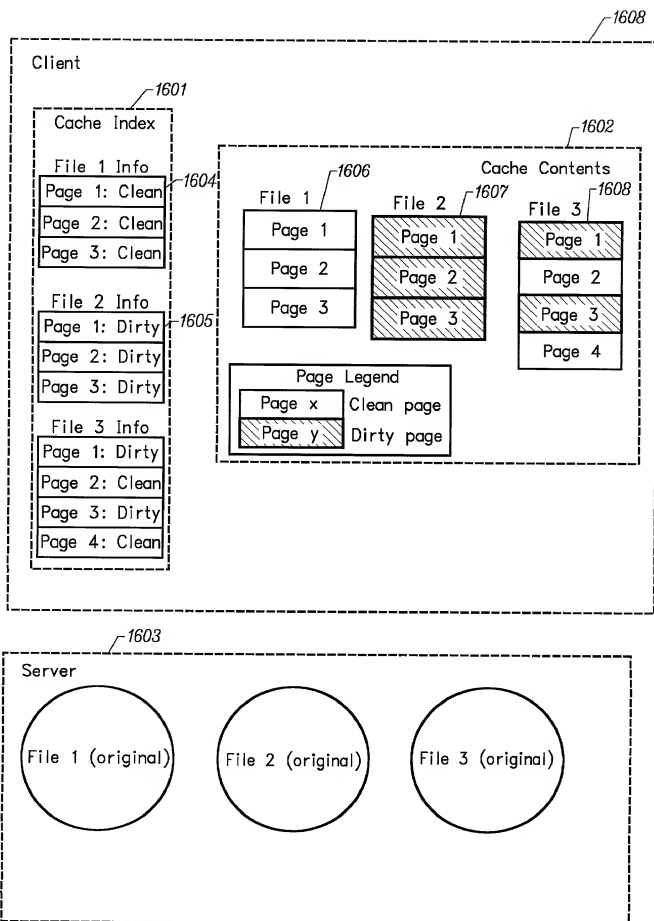


FIG. 16

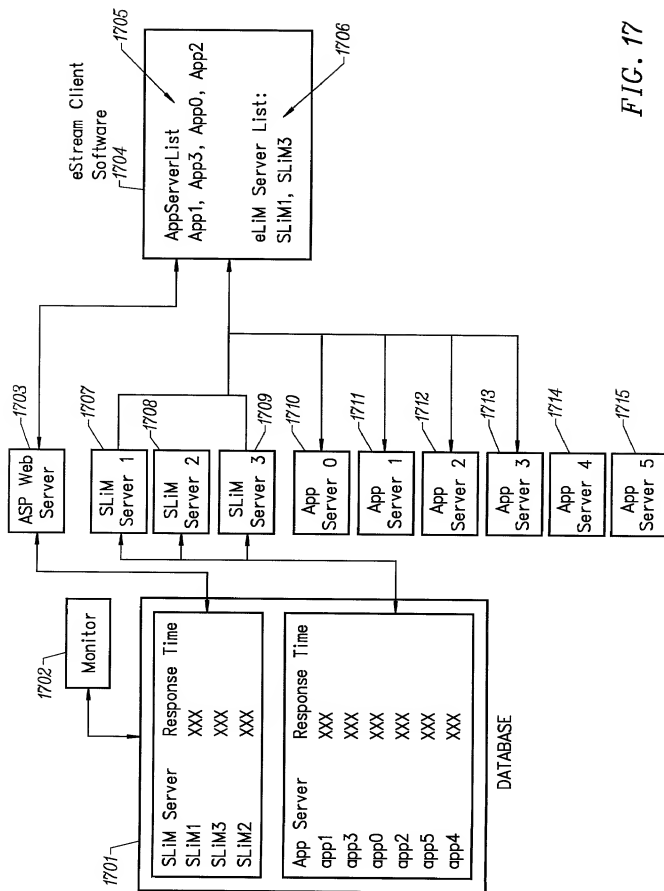
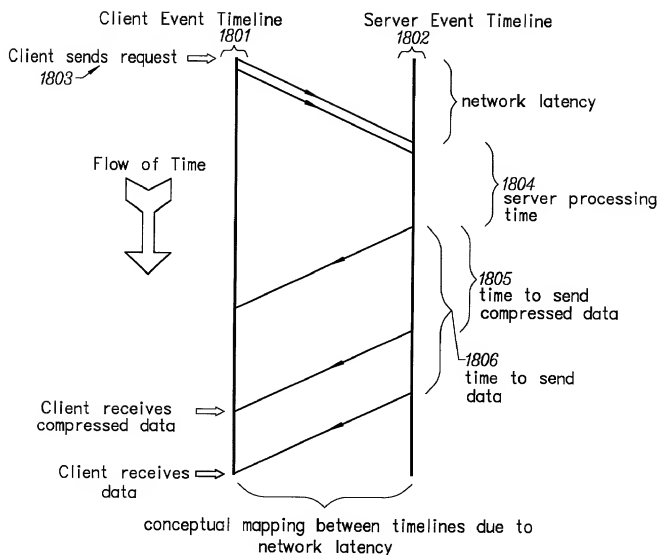


FIG. 17



Client receives data sooner if it is compressed

**FIG. 18**

# Pre-Compression

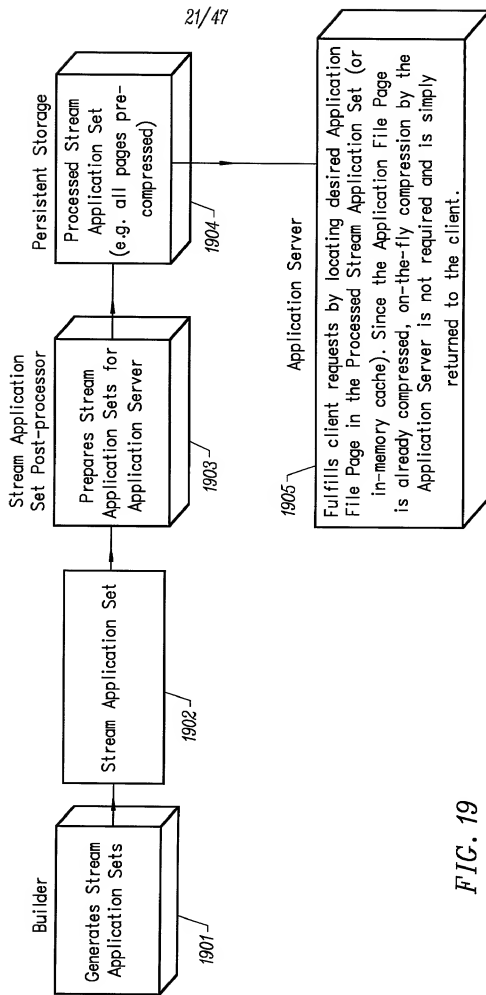
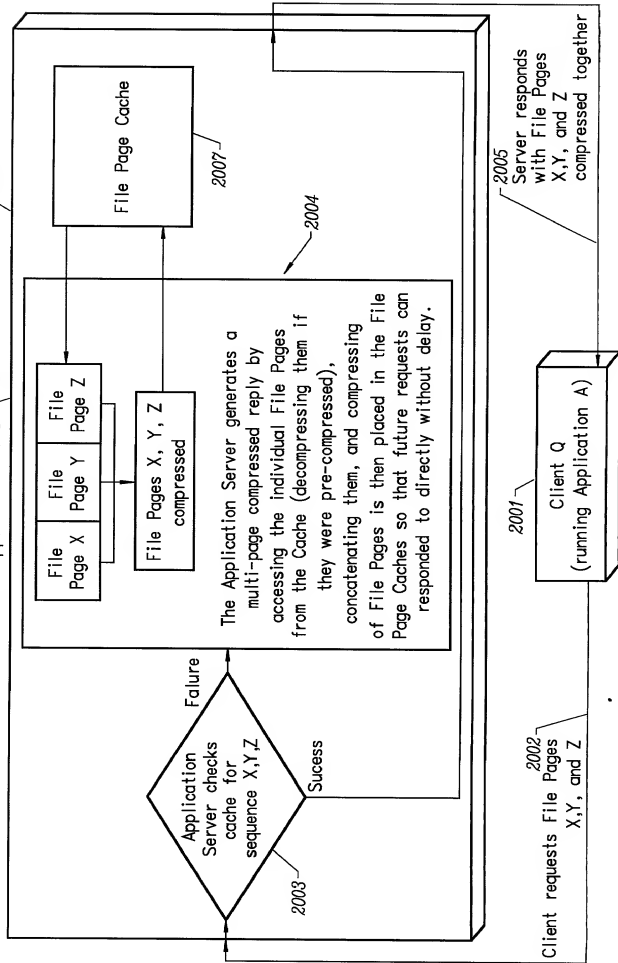


FIG. 19

FIG. 20

Multi-Page Compression

Application Server



## Profile-based Prefetching

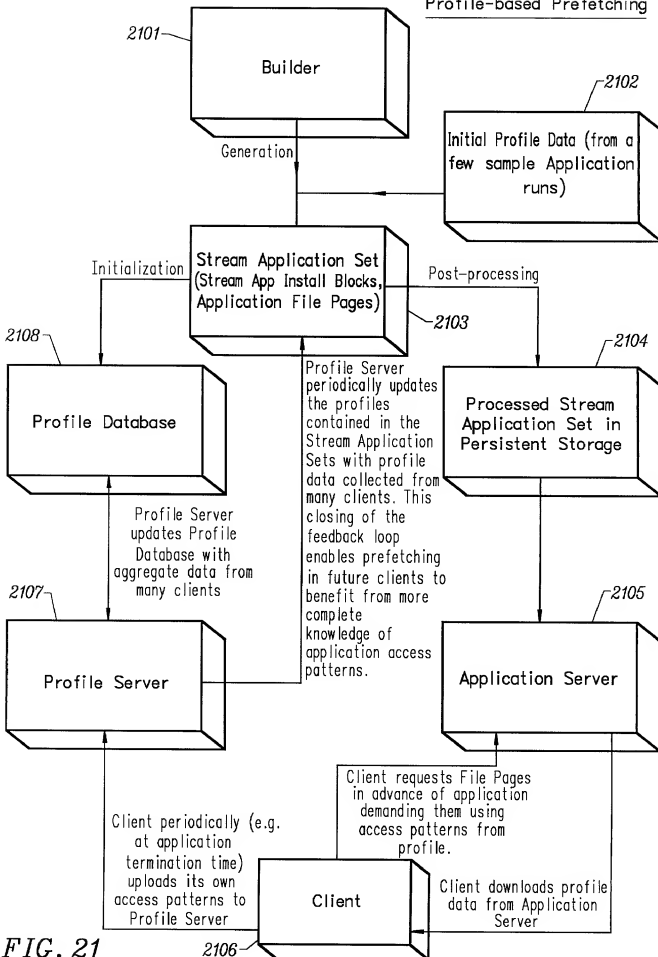




FIG. 22



Builder Install Monitor (IM) Control Flow Diagram

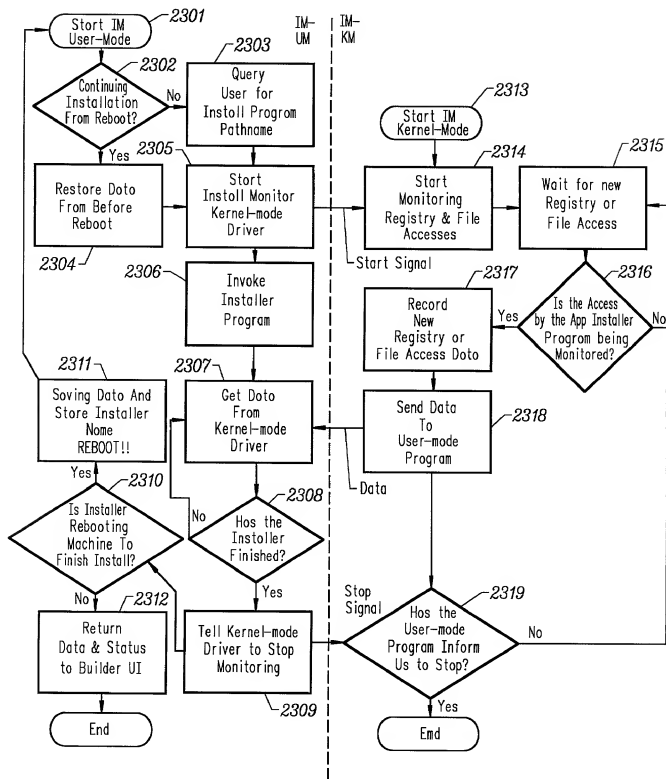


FIG. 23

## Builder Application Profiler (AP) Control Flow Diagram

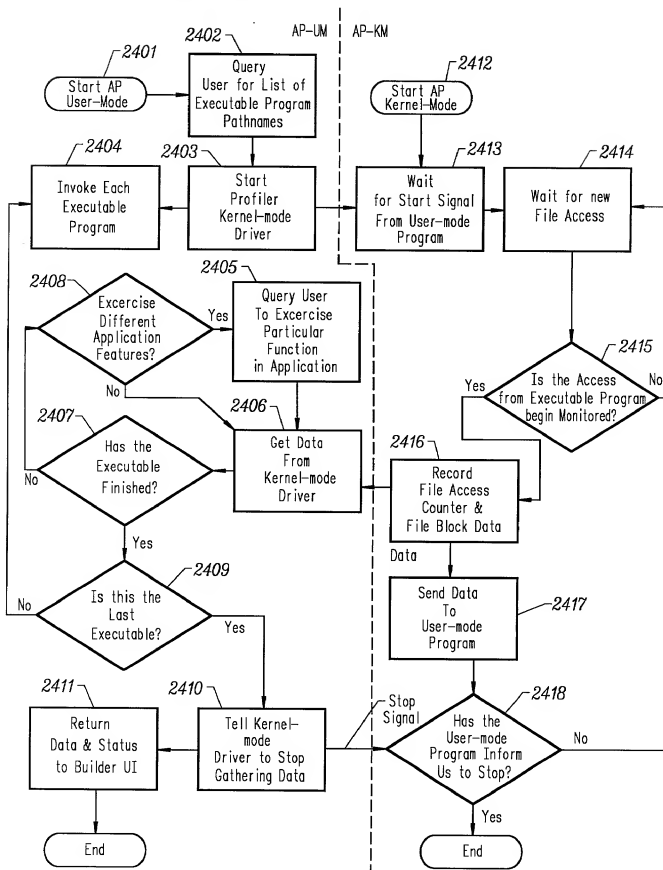


FIG. 24

## Builder SAS Packager (SP) Control Flow Diagram

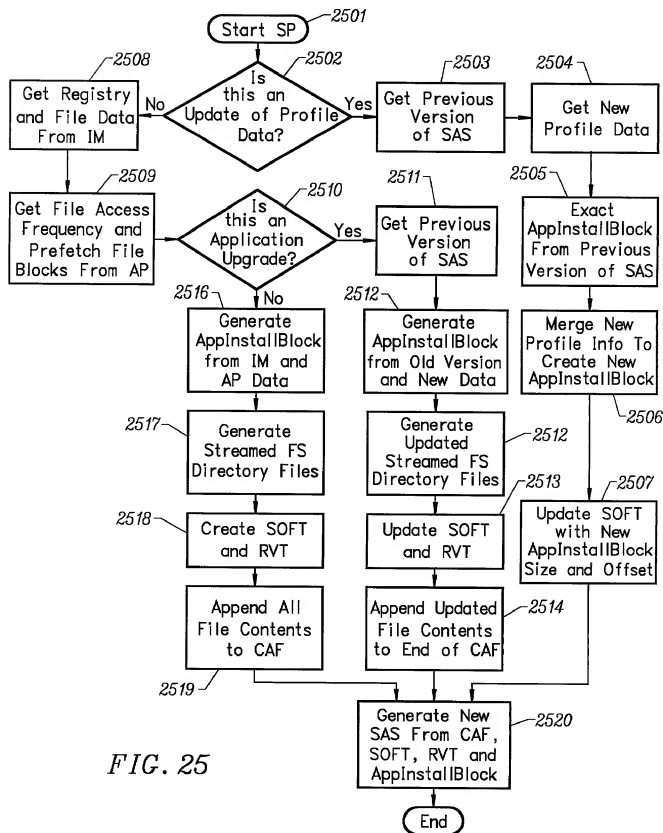


FIG. 25

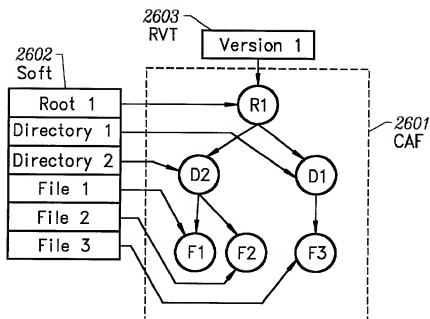


FIG. 26A

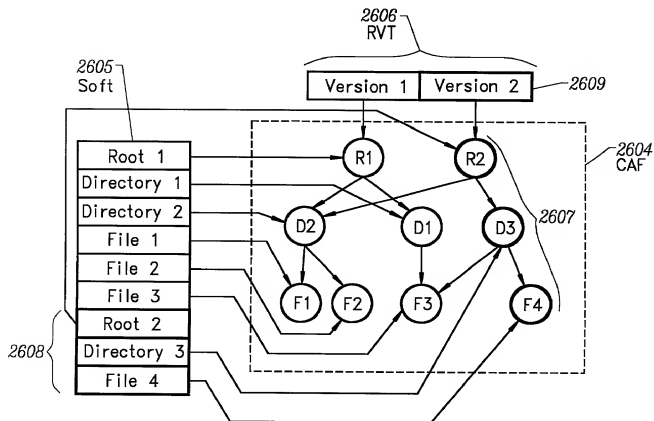


FIG. 26B

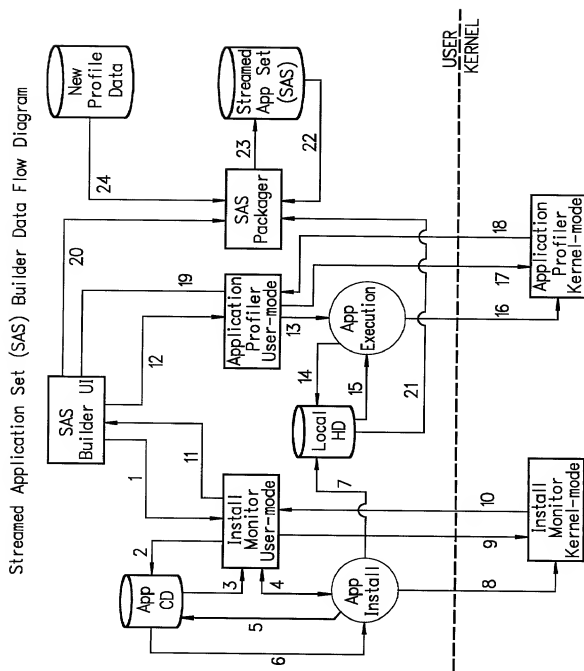


FIG. 27

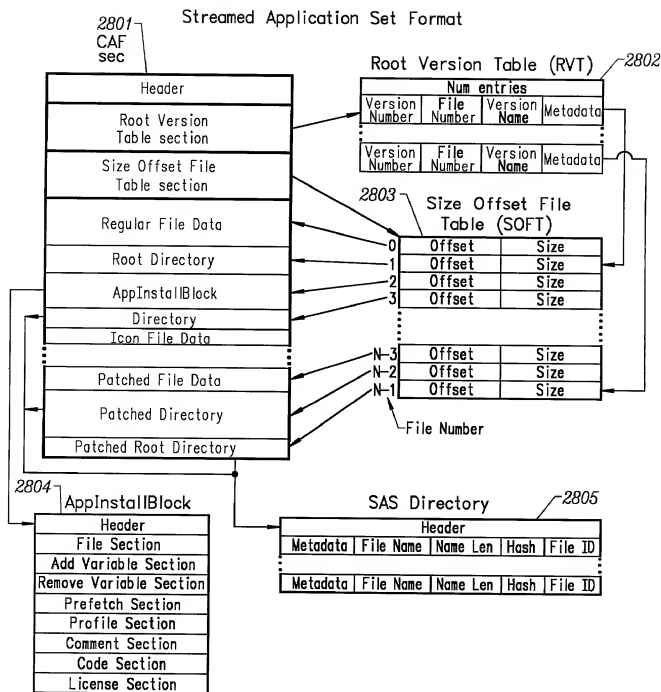


FIG. 28

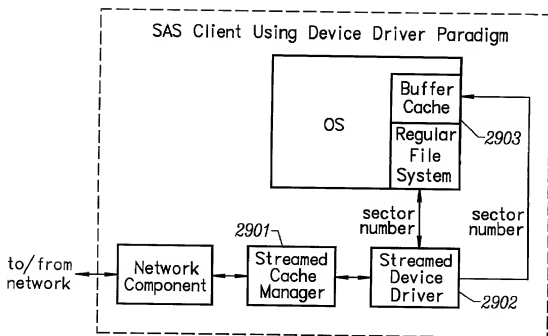


FIG. 29

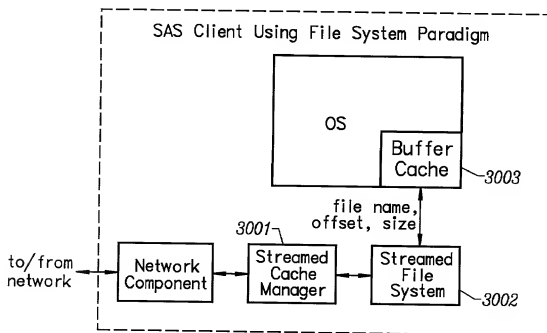


FIG. 30

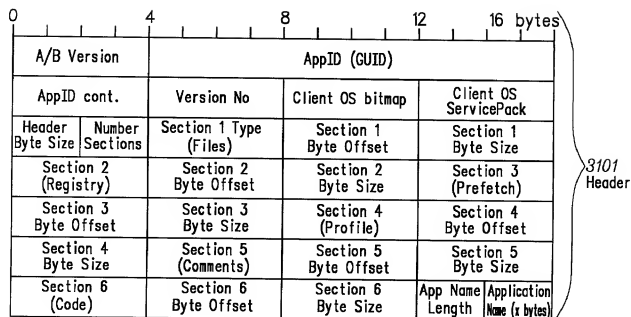


FIG. 31A

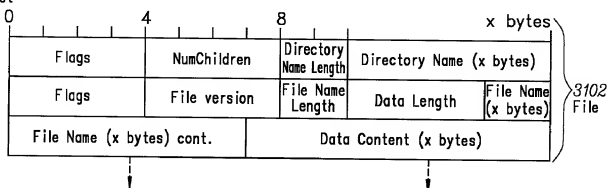
Section 1  
Offset

FIG. 31B

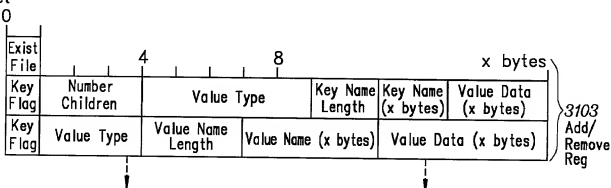
Section 2  
Offset

FIG. 31C



FIG. 31D

FIG. 31E

FIG. 31F

FIG. 31G

FIG. 31H

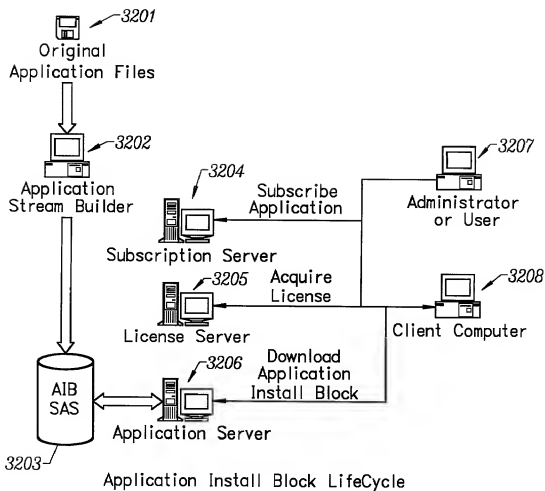


FIG. 32

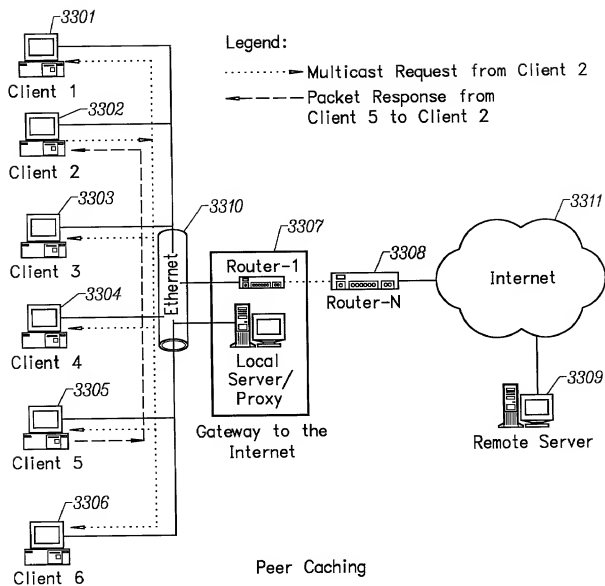


FIG. 33



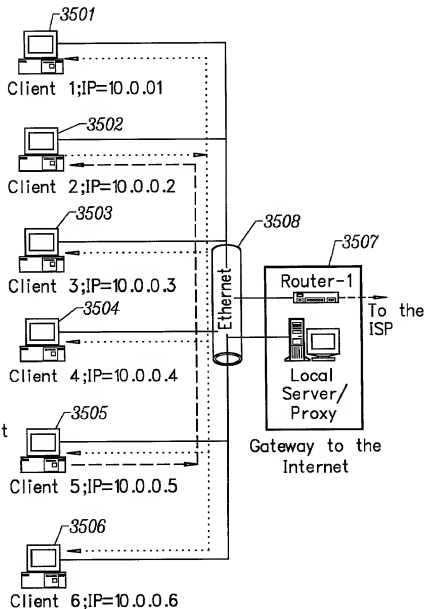
Legend:

.....→ Multicast Packet from Client 2

←----- Diagram packet from  
Client 5 to Client 2

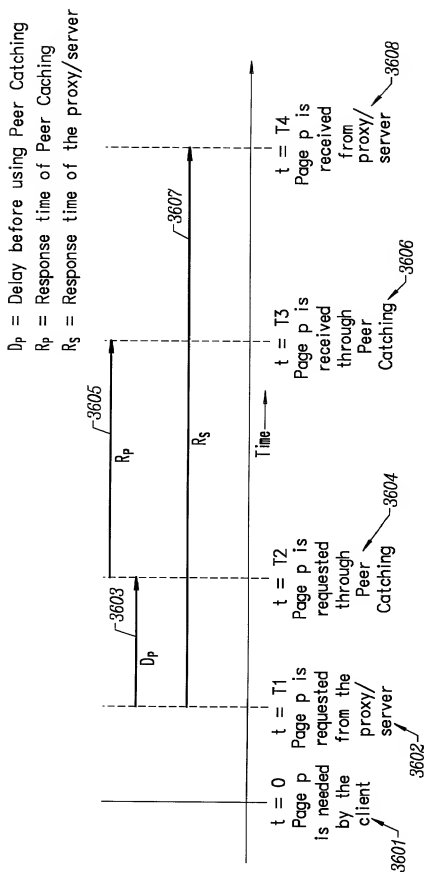
Client 2:  
Creates the request  
as a multicast packet;  
Sends the packet to  
the group 239.0.0.1  
port 2001 from port  
3002; Waits at port  
3002 for a response;

Client 5:  
Joins the multicast  
group 239.0.0.1 at port  
2001; When a packet  
is received, processes  
the request; Sends  
the response packet  
to 10.0.0.2:3002;



Multicast within a LAN  
and Packet Protocol

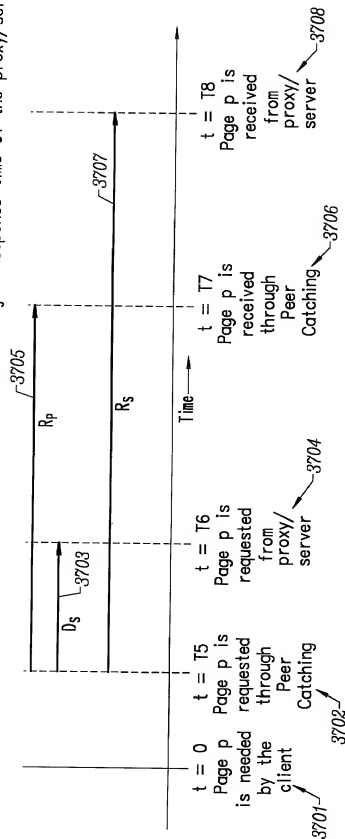
FIG. 35



Concurrent Requesting - Proxy First

FIG. 36

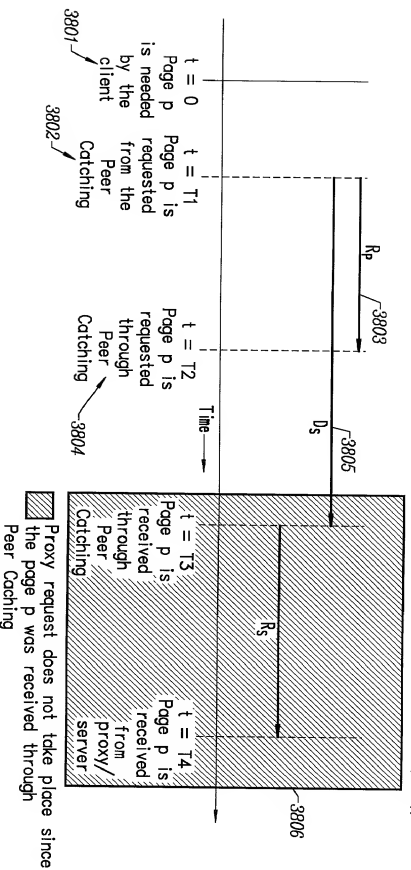
$D_s$  = Delay before requesting proxy/server  
 $R_p$  = Response time through Peer Caching  
 $R_s$  = Response time of the proxy/server



Concurrent Requesting - Peer Catching First

FIG. 37

$D_s$  = Delay before requesting proxy/server  
 $R_p$  = Response time through Peer Caching  
 $R_s$  = Response time of the proxy/server



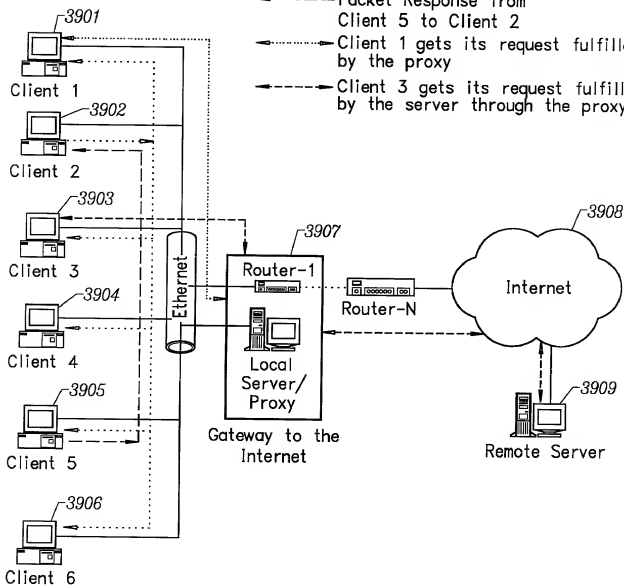
Concurrent Requesting - Peer Caching Only

FIG. 38



## Legend:

- ..... ➔ Multicast Request from Client 2
- ← - - - Packet Response from Client 5 to Client 2
- ➔ - - - Client 1 gets its request fulfilled by the proxy
- ← - - - Client 3 gets its request fulfilled by the server through the proxy



Client-Server System with Peer  
and Proxy Caching

FIG. 39

Preventing Piracy of Remotely Served,  
Locally Executed Applications

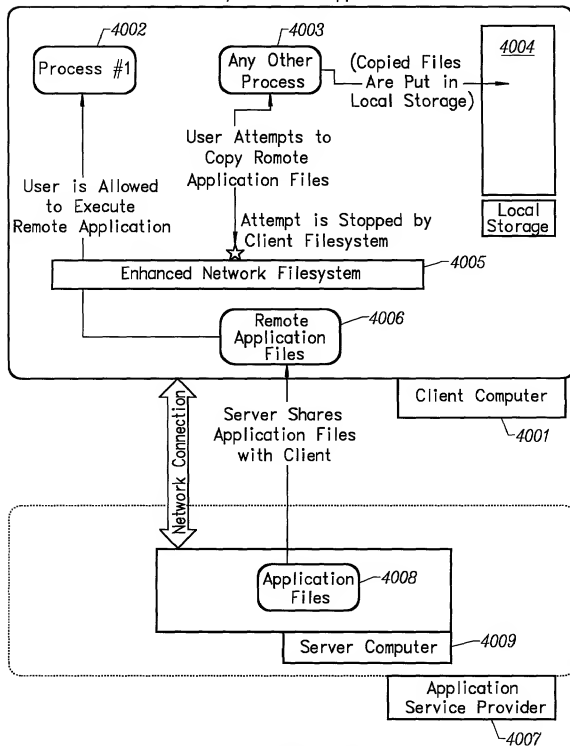


FIG. 40

## Filtering of Accesses to Remote Application Files

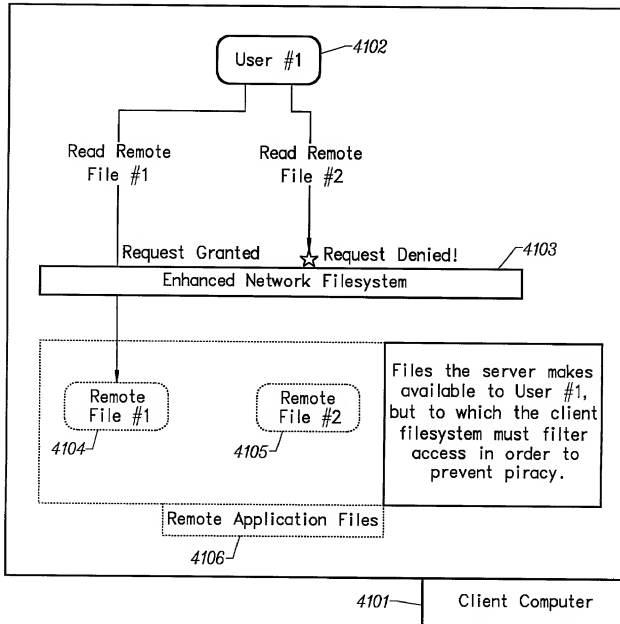


FIG. 41

Filtering of Accesses to Remote Files  
Based on Process Code Location

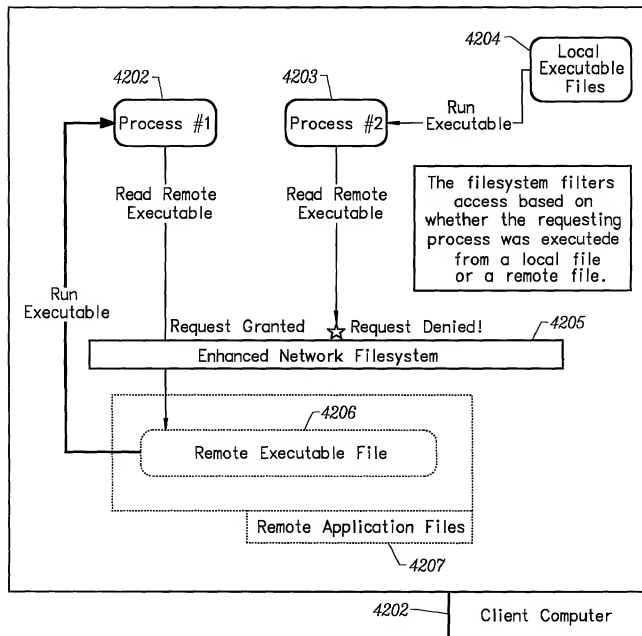


FIG. 42

Filtering of Accesses to Remote Files  
Based on Targeted File Section

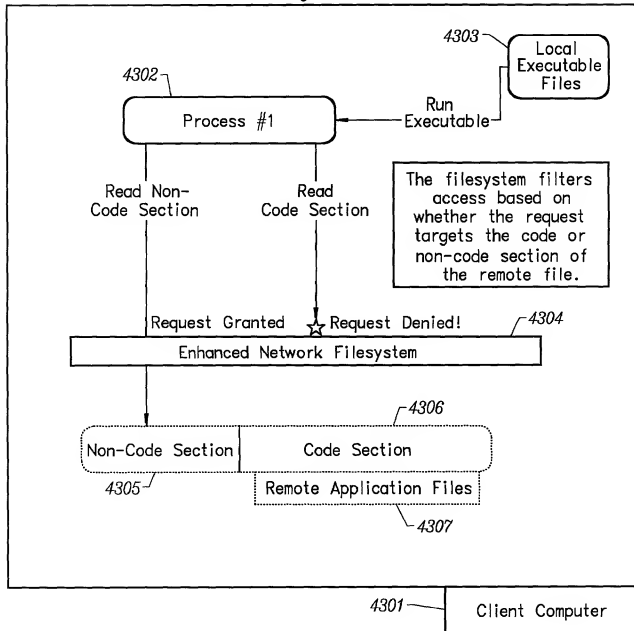


FIG. 43



# Filtering of Accesses to Remote Files Based on Past Access History

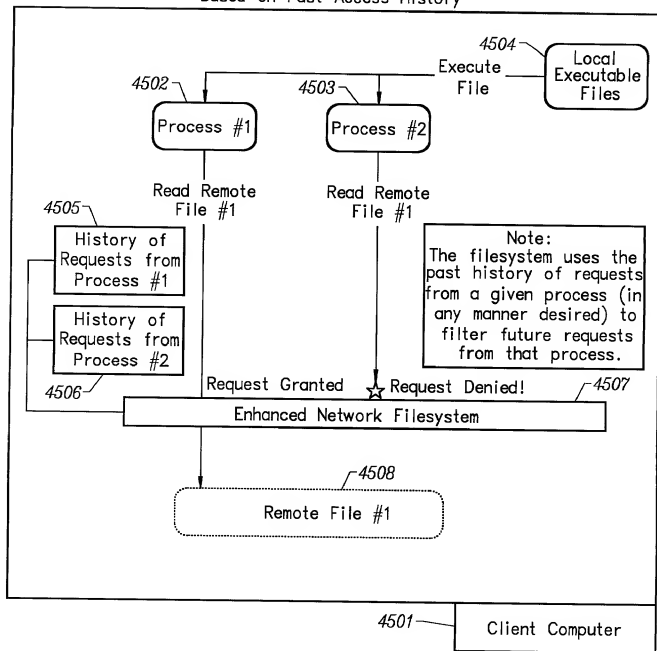


FIG. 45